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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HANDY, DWAYNE K	
ART UNIT	PAPER NUMBER
1773	

MAIL DATE	DELIVERY MODE
07/06/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,648	NEWSAM ET AL.	
	Examiner	Art Unit	
	DWAYNE K. HANDY	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *30,34-38,40-54,56,58 and 59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *30,34-38,40-44,46,48-54,56,58 and 59* is/are rejected.

7)☒ Claim(s) *45 and 47* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/23/11*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/23/11 has been entered.

Response to Arguments

2. The previous rejections have been removed. The Examiner considers the Mansky reference to be closer prior art than Fernwood. In addition, Applicant's amendments were sufficient to overcome the previous 102 rejections. The Examiner also notes Applicant's comments directed to the filing date of the Picollet-Dahan reference (see Pages 10 and 11 of Applicant's Arguments. This reference has been removed. The Examiner has provided new rejections below.

Inventorship

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 30, 34, 35, 40-44, 46, 51-54, 56, 58 and 59 rejected under 35 U.S.C. 103(a) as being unpatentable over Mansky et al. (6,455,007) in view of Mohan et al. (5,880,830). Mansky teaches an apparatus and method for testing compositions in a porous medium. The device is best shown in Figures 1A-4 and described in columns 5-8. The device includes a first plate/donor plate (26) with wells having a test membrane

(64) closing the bottom ends of the wells and a second plate (22/24) with wells. The upper openings of the wells of the second plate are in alignment with the wells of the first plate and are also closed by the test membrane (64). Mansky does not teach the cylindrical plate channel and cylindrical rod having a plurality of channels to act like a rotatable valve for each well in the rows of the first or second plate.

Mohan teaches an apparatus for multiple chemical reactions. The device is comprised of stackable layers and includes a valve block as one of the layers. The valve block (element 30) is shown in Figures 2-6 and described in column 11. The valve block (30) includes a plurality of wells (passages – 50) arranged in an array and a plurality of plate channels (second passages – 57) that run parallel to the well rows. Each of the second passages (57) receives a valve stem (55) in the form of a rod. The rod includes a series of transverse holes (56) and is rotatable between two positions to close and open its corresponding row of eight passages in the block. See column 4, lines 21-47. It would have been obvious to one of ordinary skill in the art to combine the valve channels and rods from the Mohan with the device of Mansky. Mansky teaches a stackable device, but each layer simply includes openings for fluid to flow through without any control of the flow through the openings aside from application of vacuum or pressure. One would add the valve features from Mohan to allow for the fluid control in the block passages as in Mohan.

Regarding the means for sealing the bottom wells - The Examiner submits it would be obvious to provide the valve channels and rods from Mohan in both the first

and second plates to seal both ends of the device while still allowing access using the rotatable closure of Mohan.

Regarding claim 46 – The Examiner considers a layer having the features of the Mohan device to be a sealing plate.

Regarding claims 51-53 – The Examiner submits the openings that allow the insertion of rods (71) meets the limitation of elongate and parallel slots disposed generally intermediate of adjacent rows and configured to allow a blade to contact the membrane.

Regarding claim 54 - Mansky teaches O-ring seals in column 8, lines 3-15.

Regarding claims 56 and 58 - Mansky teaches a method that includes the steps of providing the device, filling it with test material, and contacting the test membrane to the material. Mansky does not teach an inversion step. The Examiner notes that the addition of the features from Mohan would allow for closing the wells of both plates and that it would be obvious to one of ordinary skill in the arts to invert the device in order to mix the contents. This would provide contact between the test fluid and membrane without requiring the vacuum or pressure system of Mansky.

6. Claims 36-38 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansky et al. (6,455,007) in view of Mohan et al. (5,880,830), and further in view of Pfost et al. (6,485,690). Pfost teaches a device for multiple fluid sample processing. The device is best shown in Figures 1-8. The device is comprised of a plurality of stackable layers with upper and lower layers having wells extending

through the layers. In column 11, Pfost teaches the inclusion of electrical elements for heating the contents of the layer. It would have been obvious to one of ordinary skill in the art to combine the electrical elements *in the layers* as taught by Pfost with the device of Mansky. Mansky teaches heating the device by placement in an oven or by heating the base (column 11, lines 29-31). The placement of electrical elements directly into the layers as in Pfost would allow for direct heating of the contents in the layers and also allow for individual control of the well temperatures. This heating arrangement would be an improvement upon the oven or base heating taught by Mansky.

Allowable Subject Matter

7. Claims 45 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 45 recites a magnetic valve. Claim 47 recites a one-way collapsible valve. The Examiner did not find prior art which taught or suggested these features as currently claimed.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWAYNE K. HANDY whose telephone number is (571)272-1259. The examiner can normally be reached on M-F 11:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DWAYNE K HANDY/
Examiner, Art Unit 1773

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1773

June 19, 2011